

# Work Order ID 86624

Friday, July 06, 2012 10:13:16 AM

**\*86624\***

Page 1

Item ID: D4522-9

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Vertical Swing Arm

Start Date: 7/5/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 7/19/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals: Process Plan: *MF*

Date: *2-07-06* Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4522

B

100

0.00

**\*100\***

Bandsaw

Memo

0.00

Jeaspa Bandsaw

CUT BLANK AT 2.250"

*12/07/10*

*2*

*0*

110

0.00

**\*110\***

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

MACHINE AS PER DWG & FOLIO FB108

FOLIO REV: *BR*

DWG REV: *R*

*07/27, 2.7.16*

*2*


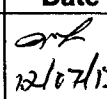
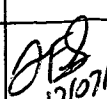



*1*

*7/10/12*

DEBURR

W/O: 86624		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D4522-9 PAR #: \_\_\_\_\_ Fault Category: Machining NCR: Yes No DQA: OK Date: 12/07/24  
 Resolution: \_\_\_\_\_ Disposition: Scrap QA: N/C Closed: OK Date: 12/7/24

NCR: 12-1614		WORK ORDER NON-CONFORMANCE (NCR) 491.10						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12/07/17	110	1 part scrap. the dim 1.75 are too small by .100"  R.C. program error	 12/07/17	scrap and replace Qty: 1 Batch# M121761 fix <del>the</del> program.	 12/07/17   12/07/17	 12/07/17	 057442 12/07/17	 12/07/17

NOTE: Date & initial all entries

**Work Order ID 86624**

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**\*86624\***

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Item ID: D4522-9

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Vertical Swing Arm

Stop **\*NS2\***

Start Date: 7/5/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 7/19/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*120\***

QC

Memo

0.00

Quality Control

DAS  
14  
12/07/17

2

0

130

QC8- Inspect parts - second check

0.00

**\*130\***

QC

Memo

0.00

Quality Control

SL 12-07-18

②

140

Identify as per dwg &amp; Stock Location

0.00

**\*140\***

Packaging

Memo

0.00

Packaging

②

12/7/19

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 86624**

Friday, July 06, 2012 10:13:16 AM

**\*86624\***

Page 3

Item ID: D4522-9

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Vertical Swing Arm

Stop **\*NS2\***

Start Date: 7/5/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 7/19/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_

Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

QC21- Final Inspection - Work Order Release

0.00

**\*150\***

QC

Memo

0.00

Quality Control

12/7/20 JH

mf  
12-07-19

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Friday, July 06, 2012 10:13:15 AM

Page 1

Work Order ID: 86624  
Parent Item: D4522-9  
Parent Item Name: Vertical Swing Arm

Start Date: 7/5/2012 Required Date: 7/19/2012  
Start Qty: 2.00 Required Qty: 2.00

Comments: IPP REV:A NEW ISSUE 12-01-04 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303B2.500X2.000 303 BAR 2.5" X 2"		Purchased	No			100	f	4.0000	0.1875	0.3947368		12/07/10	

Location

MAT050

→ 121769

Loc Qty

4

4

Loc Code

0.3947 ft

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

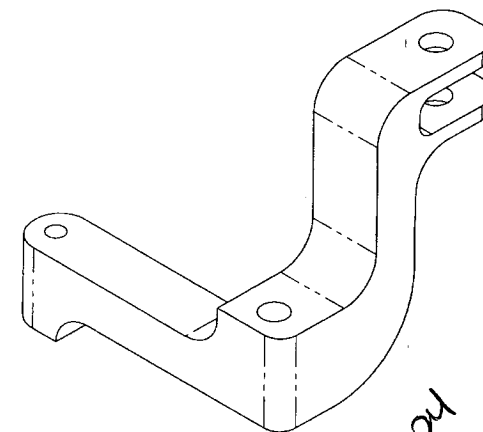
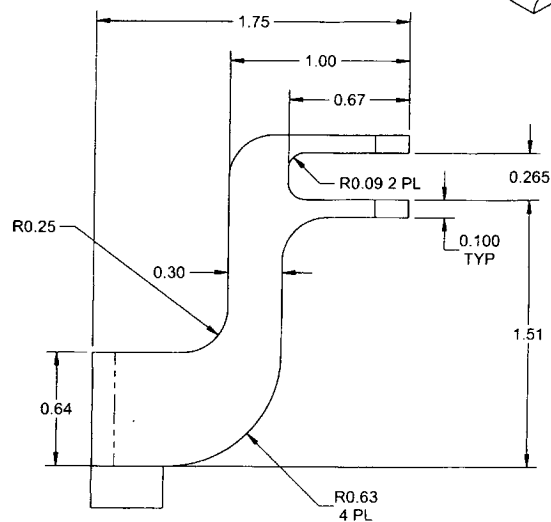
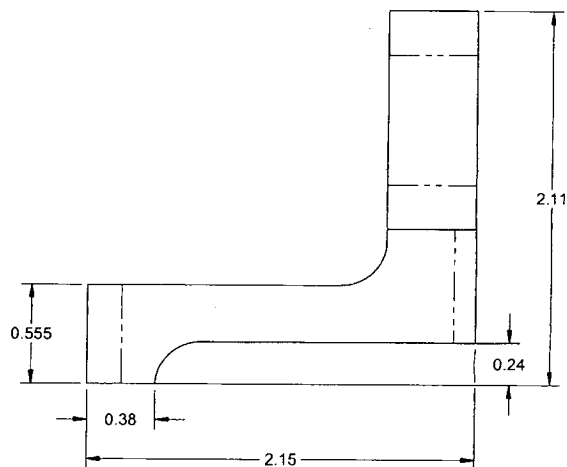
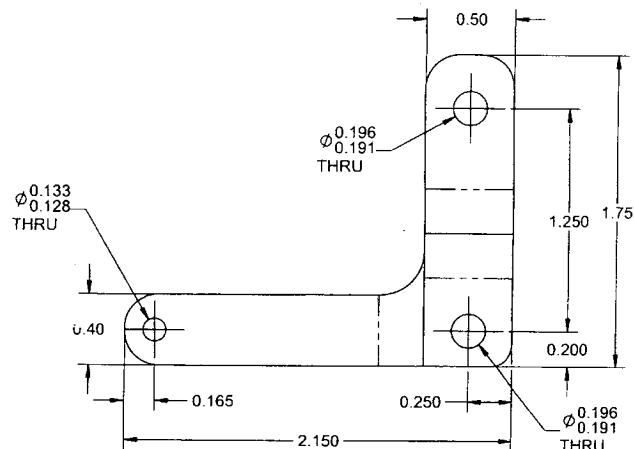
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





# NOTES:

- 1) MATERIAL: AISI 303 SS BAR PER ASTM A582  
REF DART SPEC M303B OR  
AISI 304/316 SS BAR OR PLATE  
PER ASTM A276 OR ASTM A240  
REF DART SPEC M304B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER DART QSI 044 6.6 OR 6.7
- 7) WEIGHT: 0.19 lbs
- 8) PROFILE PER DWG FILE "D4522-9-RevB.STP"

## D4522-9 VERTICAL SWING ARM

RELEASED  
2012-06-13

DESIGN	RP	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RP		
CHECKED	<i>[Signature]</i>	DRAWING NO. <b>D4522</b>	REV. B
MFG. APPR.	<i>[Signature]</i>	SHEET 12 OF 23	
APPROVED	<i>[Signature]</i>	TITLE <b>DOOR LATCH ASSY (412)</b>	SCALE NTS
DE APPR.	<i>[Signature]</i>	COPYRIGHT © 2012 BY DART AEROSPACE LTD	
DATE	12.04.17	THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 86624
<b>Description:</b> VERTICAL SWING ARM		<b>Part Number:</b> D4822-1
<b>Inspection Dwg:</b> D4822 <b>Rev:</b> B		<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.50	$\pm 0.30$	.502	—		Ueln M1-02	
1.75	$\pm 0.30$	1.755	—		"	
1.250	$\pm 0.05$	1.250	—		"	
.200	$\pm 0.10$	.200	—		"	
Ø.191	$\pm 0.05$	Ø.191	—		"	
.250	$\pm 0.10$	.246	—		"	
2.15	$\pm 0.30$	2.148	—		"	
.165	$\pm 0.10$	.163	—		"	
Ø.128	$\pm 0.05$	Ø.128	—		"	
2.11	$\pm 0.30$	2.113	—		"	
.24	$\pm 0.30$	.233	—		"	
.38	$\pm 0.30$	.375	—		"	
.555	$\pm 0.10$	.546	—		"	
.64	$\pm 0.30$	.640	—		"	
.30	$\pm 0.30$	.297	—		"	
<del>1.75</del>	<del><math>\pm 0.30</math></del>					
1.00	$\pm 0.30$	1.006	—		"	
.67	$\pm 0.30$	.677	—		"	
.100	$\pm 0.10$	.101	—		"	
.265	$\pm 0.10$	.264	—		"	
1.51	$\pm 0.30$	1.509	—		"	

<b>Measured by:</b> DAS 14	<b>Audited by:</b> SL	<b>Preliminary Approval:</b>
<b>Date:</b> 12/07/17	<b>Date:</b> 12-07-18	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15